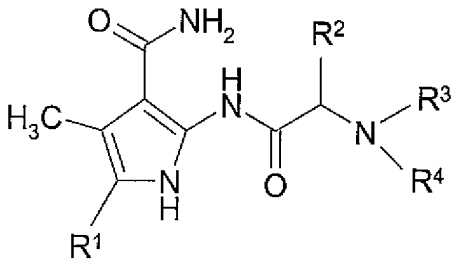
REMARKS

Claims 46-83 are currently pending in the present application, including independent claim 46 and withdrawn claims 59-83. Independent claim 46 is directed to a compound of the structure:



wherein: R^1 is $CONH_2$, CH_2SCH_3, $CH_2SCH_2CH_3$, $CH_2CH_2SCH_3$, $CH_2CH_2SCH_2CH_3$, CH_2NCH_3, or $CH_2NCH_2CH_3$; R^2 is H, CH_3, CH_2CH_3, CH_2SCH_3, $CH_2SCH_2CH_3$, $CH_2CH_2SCH_3$, or $CH_2CH_2SCH_2CH_3$; R^3 is CH_3, C_2H_5, ηC_3H_7, iC_3H_7, or, ηC_4H_9; and R4 is CH_3, C_2H_5, ηC_3H_7, iC_3H_7, or, ηC_4H_9.

As shown, each of the R^1 groups of independent claim 46 is an impure hydrocarbon chain (i.e., contains either a nitrogen or a sulfur).

Although support for independent claim 46 can be found in the presently pending application based on the disclosure of each R group of the structure shown in original claim 1, Applicants have amended the specification to specifically include the structure of independent claim 46. Support for this amendment to the specification is found throughout the present application, and in provisional application Ser. No. 60/519,140, which was incorporated by reference into the present application. (See e.g., pg. 1, paragraph 1).

Restriction Requirement

Applicants elect to prosecute the claims of Group I corresponding to the product claims without traverse. Claims 46-58 are encompassed by this group. As such, the claims of Group II have been withdrawn from the present application.

Applicants note that all of the pending method claims (i.e., claims 59-83) refer to the product of independent claim 46. As such, Applicants request rejoinder of withdrawn claims 59-83 upon allowance of independent claim 46.

Priority

Independent claim 46 is fully supported by original provisional application, Ser. No. 60/519,140, as admitted by the Examiner. (See, Office Action, pg. 10). As such, independent claim 46 is entitled to the benefit of the filing date of the provisional application, Ser. No. 60/519,140, which is November 12, 2003.

Rejections 35 U.S.C. § 112, second paragraph

The rejections under 35 U.S.C. § 112, second paragraph are moot in view of the newly submitted claims.

Novelty under 35 U.S.C. §102(a) in view of CA Reg. No. 760897-03-8

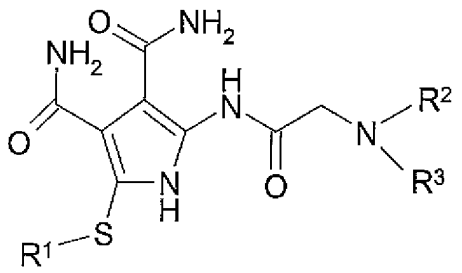
Since independent claim 46 is entitled to the benefit of the filing date of provisional application Ser. No. 60/519,140, which is November 12, 2003 and CA Reg. No. 760897-03-8 was published on Oct. 11, 2004, it is not available as a valid reference under any paragraph of §102.

Novelty under 35 U.S.C. §102(b)

None of the cited references, namely Boehm, et al., Wang, et al., Sowell, et al.(1), and Sewell, et al.(2), disclose the compound of independent claim 46. As such,

independent claim 46 is novel over all of these references. Nonetheless, each reference is discussed in greater detail below:

The Office Action refers to Formula III of Boehm, et al. for the disclosure of the compound:



Formula II of Boehm

where R^1 is alkyl and R^2, R^3 are H, alkyl, heteroalkylen, or aryl. However, this compound of Boehn has two amide functional groups on the pyrrole ring, which can substantially change the functionality of the compound (e.g., acid/base tendency and pH of any solution encompassing the compound). Additionally, though the compound of Boehn has an alkyl group attached to the pyrrole ring via a sulfur linkage, Boehm, et al. fails to teach an impure hydrocarbon chain (i.e., containing either a nitrogen or a sulfur) as R of their structure.

Wang, et al. discloses 2-aminopyrrole analogs of lidocaine having a benzyl substituent (i.e., $C_6H_5CH_2$- group) attached to the pyrrole ring. The benzyl substituent is generally in the same location as R^1 of the compound in independent claim 46 of the present application. However, none of the R^1 groups embodied by independent claim 46 includes a ring structure, much less an aromatic ring like benzene. Thus, Wang, et al. fails to teach the compound of independent claim 46.

The Office Action refers to compound V*n* in Table II on page 539 of Sowell, et al.(1) in rejecting previously pending claim 1. Table II of Sowell, et al.(1) describes compounds related to the formula:

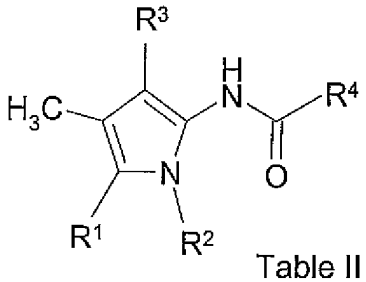
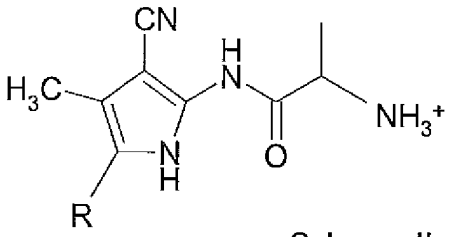


Table II of Sowell (1)

In the table, the R^1 substituents used are CH_3, C_2H_5, or CH_2-C_6H_5 (i.e., a benzyl substituent).[1] For example, compounds V*m* and V*n* show that R^1 is CH_3 and C_2H_5, respectfully, R^2 is H; R^3 is $CONH_2$; and R^4 is $CH_2CH_2N(C_2H_5)_2$. However, Sowell, et al.(1) fails to disclose an impure hydrocarbon chain (i.e., containing either a nitrogen or a sulfur) as R^1 of their structure.

Similarly, the Office Action refers to compound XVI in Scheme II on page 136 of Sowell, et al.(2) in rejecting previously pending claim 1. Compound XVI of Scheme II of Sowell, et al.(2) describes compounds related to the formula:



Scheme II of Sowell (2)

where R is CH_3 (compound XV), iso-C_4H_9 (compound XVI), or $CH_2C_6H_5$ (compound XVII). Not only does Sowell, et al.(2) teach a cyano group on the pyrrole ring, but

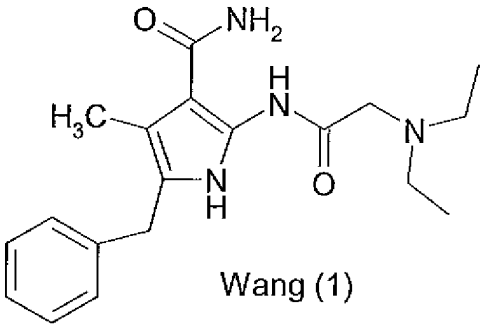
[1] Although included as a list, it is understood that Sowell, et al.(1) discloses only specific combinations of R groups in Table II.

Sowell, et al.(2) also fails to disclose an impure hydrocarbon chain (i.e., containing either a nitrogen or a sulfur) as R of their structure.

Nonobviousness under 35 U.S.C. §103(a)

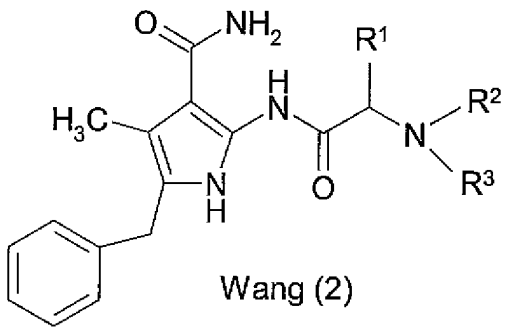
All of the previously pending claims were rejected under §103(a) in view of Wang, et al. in combination with any one of Sowell, et al.(1), Sewell, et al.(2), Allen, Jr., et al., Johnson, et al.(1), or Johnson, et al.(2). However, Applicants respectfully submit that independent claim 46 is patentable over Wang, et al., in any combination.

Wang, et al. is directed to 2-aminopyrrole analogs of lidocaine investigated as local anesthetic and antiarrhythmic agents. The analogs are shown by Wang, et al. to be



Wang (1)

and



Wang (2)

(see pg. 1). Both compounds of Wang, et al. are shown to have a benzyl substituent (i.e., the $C_6H_5CH_2$- group) attached to the pyrrole ring. However, therapeutic use of Wang (1) and Wang (2) was ruled out due to its low water solubility and its propensity to precipitate in blood.

One of ordinary skill in the art would not have modified either structure shown in Wang, et al. to substitute an impure hydrocarbon chain (i.e., containing either a nitrogen or a sulfur) for the benzyl substituent of either compound Wang (1) or Wang (2) in order to achieve the compound of independent claim 46. The impure hydrocarbon chains

required by independent claim 46 have a completely different electron structure than a conjugated benzyl substituent, and can lead to significant differences between the polarity of the overall molecules and functionality of the other substituents on the pyrrole ring. In fact, none of the secondary references teach or even suggest such an impure hydrocarbon chain attached to a pyrrole ring. As such, Applicants respectfully submit that independent claim 46 is patentable over the cited references.

Applicants also respectfully submit that for at least the reasons indicated above relating to independent claim 46, the pending dependent claims patentably define over the references cited. However, Applicants also note that the patentability of the dependent claims certainly does not hinge on the patentability of independent claim 46. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of independent claim 46.

Applicants respectfully submit that the present application is in complete condition for allowance, and therefore respectfully request favorable action and reconsideration of rejections of the Office Action with regard to the above remarks. However, any further questions or concerns, the Examiner is invited and encouraged to contact the undersigned.

Please charge any deficiencies or credit any overpayments required by this Response to Deposit Account No. 04-1403.

Respectfully requested,
DORITY & MANNING, P.A.

Date: Oct. 28, 2009

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